In the Specification

Page 38, between lines 1 and 2, insert--

Brief Description of the Drawings

Drawing # 1 is a computer program flowsheet for Process#1 and Process#1A. Drawing #1 is a flowsheet illustrating computer programs that execute Process#1 and Process#1A. –

In the Claims

Please amend the following claims as follows:

20. (ONCE AMENDED) A process as in any one of claims 3-5, 7 or 8, wherein there is a subgroup of the covering markers, and the markers in the subgroup are a majority of the covering markers, and each marker in the subgroup is an SNP, or a bi-allelic marker equivalent formed only from one ~~or more~~ SNPs.

23. (ONCE AMENDED) A process as in claim 22, wherein the process comprises a computer program.

50. (ONCE AMENDED) A process for obtaining genotype data/sample allele frequency data as in any one of claims 33-35, 37 or 38, wherein there is a subgroup of the covering markers, and the markers in the subgroup are a majority of the covering markers, and each marker in the subgroup is an SNP, or a bi-allelic marker equivalent formed only from one or more SNPs.

Please cancel the following apparatus claims and replace each claim with an equivalent claim that is in proper "means plus function" for U.S. patent practice:

Please cancel apparatus claim 54 and replace claim 54 with a new equivalent apparatus claim 97 that is in proper "means plus function" for U.S. patent practice.

97. An apparatus for obtaining genotype data/sample allele frequency data for each bi-allelic marker of a group of two or more bi-allelic covering markers in the chromosomal DNA of one or more individuals of a sample, each individual in the sample being a member of the same species, comprising:

a) means for determining information on the presence or absence of each allele of each bi-allelic marker of a group of two or more bi-allelic covering markers in the chromosomal DNA of one or more individuals of a sample, a CL-F region being systematically covered by the two or more bi-allelic covering markers, the CL-F region being a collection of points on a two-dimensional plane, the two-dimensional plane having the two orthogonal dimensions of chromosomal location and least common allele frequency; and

b) means for transforming the information of means a) into genotype data/sample allele frequency data for each marker of the group.

Please cancel apparatus claim 57 and replace claim 57 with a new equivalent apparatus claim 98 that is in proper "means plus function" for U.S. patent practice.

98. An apparatus as in claim 97, wherein the apparatus comprises oligonucleotide technology or mass spectrometry.

Remarks

Regarding changes to the Specification: Attached herewith is a marked-up version of the changes made to the specification (see Marked up Amended Sheet, p. 38 with Section paragraph entitled Brief Description of Drawings added, lines 2-4; these lines have been underlined). Also attached herewith is an amended sheet in clean form (see Amended Sheet, Clean form p.38) that includes the addition of Section paragraph entitled Brief Description of Drawings added, lines 2-4; without markings. Both sheets are on size A4 paper.

Regarding changes to the Claims: Attached herewith is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned **"Versions with markings to show changes made to the claims".**

The applicants wish to respectfully thank the Examiner for his examination of the present application. In the Office Action, the Examiner examined claims 1 through 96 inclusive submitted April 2000 in the PCT International Stage Application. The applicants, however, respectfully note that prior to 30 month entry into the US National Stage, all of these April 2000 claims were cancelled except for claims 3, 4, 5, 7, 8, 20, 21, 22, 23, 33, 34, 35, 37, 38, 50, 51, 52, 53, 54, and 57. The applicants thus respectfully submit that only claims 3, 4, 5, 7, 8, 20, 21, 22, 23, 33, 34, 35, 37, 38, 50, 51, 52, 53, 54, and 57 are still pending or were ever pending in the present US National Stage application.